

### **REMARKS**

Claims 1, 3-11, 13-29 are currently pending in the application. Claims 1, 9-11, and 19-20 have been amended. Support for amendments to independent claims 1 and 11 can be found throughout the specification and more specifically in Figures 3-4. Claims 2 and 12 have been canceled. New claims 21-29 have been added. Applicant respectfully submits that no new matter has been added. Applicant respectfully requests reconsideration of the application in view of the foregoing amendments and the following remarks.

Claim 20 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter the Applicant regards as the invention. In response, Applicant has amended claim 20. Withdrawal of the rejection of independent claim 20 under § 112 is respectfully requested.

Claims 1, 6-7, and 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,822,610 to Yeh (“Yeh”). Independent claim 1 relates to a multi-band monopole antenna. Applicant respectfully submits that Yeh fails to teach or suggest at least one of the distinguishing features of independent claim 1, namely, a first conductor for receiving networking signals in the frequency range of about 4.9 GHz to about 5.875 GHz, the first conductor comprising a polygonal portion and further comprising a strip portion having a width smaller than a width of a polygonal portion, a first end of the strip portion is connected to a feeding point, and a second end of the strip portion is connected to the polygonal portion. In addition, Applicant respectfully submits that Yeh fails to disclose a second conductor having a first end connected to the feeding portion.

Yeh discloses a planar monopole antenna operable at two different frequency ranges. The antenna comprises two radiating elements printed on a dielectric substrate and extending beyond a ground metal plate. The antenna further comprises a signal feed point connected to two radiating elements via a patch line printed on the dielectric substrate. According to Yeh, the second radiating element 543, 643, as illustrated in Figures 5-6, is a rectangular plate. In contrast, the second radiating element 543, 643 of Yeh fails to disclose *a strip portion having a width smaller than a width of a polygonal portion* as claimed. In addition, according to Yeh, a

first end of the second radiating element (543, 643) is connected to a feeding point (541, 641) via a patch line (54, 64). The first radiating element (542, 642) is connected to a second end of the second radiating element (543, 643), the second end being opposite to the first end. Yeh discloses only a first end of the second radiating element being connected to the feeding point but fails to disclose both *a first end of a strip portion of a first conductor and a first end of a second conductor being connected to the feeding point* as claimed. Applicant respectfully submits that independent claim 1 distinguishes over Yeh. Withdrawal of the rejection of independent claim 1 is respectfully requested.

Dependent claims 6-7 depend from and further restrict independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claims 6-7 distinguish over Yeh and are in condition for allowance. Withdrawal of the rejection of dependent claims 6-7 is respectfully requested.

Claim 9 has been amended to now be an independent claim by incorporating features from independent claim 1. Applicant respectfully submits that Yeh fails to teach or suggest at least one of the distinguishing features of independent claim 9, namely, a first conductor for receiving networking signals in the frequency range of about 4.9 GHz to about 5.875 GHz, the first conductor comprising a polygonal portion and further comprising a strip portion having a width smaller than a width of a polygonal portion, a first end of the strip portion is connected to a feeding point, and a second end of the strip portion is connected to the polygonal portion. For similar as stated above with respect to independent claim 1, Applicant respectfully submits that independent claim 9 distinguishes over Yeh. Withdrawal of the rejection of claim 9 is respectfully requested.

Claims 1, 6-7, 9, 11, 16-17, and 19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,747,600 to Wong et al. (Wong”). Independent claim 1 relates to a multi-band monopole antenna. Applicant respectfully submits that Wong fails to teach or suggest at least one of the distinguishing features of independent claim 1, namely, a first conductor for receiving networking signals in the frequency range of about 4.9 GHz to about

5.875 GHz, the first conductor comprising a polygonal portion and further comprising a strip portion having a width smaller than a width of a polygonal portion, a first end of the strip portion is connected to a feeding point, and a second end of the strip portion is connected to the polygonal portion. In addition, Applicant respectfully submits that Wong fails to disclose a second conductor having a first end connected to the feeding portion.

Wong discloses dual-band monopole antenna for a WLAN system. The antenna comprises first and second horizontal radiating metallic lines disposed substantially parallel to each other and connected to a vertical radiating metallic line at different positions forming a stacked double T shaped. In Wong, a first conductor, as illustrated in Figures 1 and 7, is formed by half of the first and second horizontal radiating metallic lines 12 and 712. In contrast, the first conductor of Wong fails to disclose *a strip portion having a width smaller than a width of a polygonal portion* as claimed. In addition, according to Wong, a combination of a vertical radiating metallic line (13, 713) and a first horizontal metallic line (11, 711) forms a resonant path of the antenna responsible for a lower operating frequency, while a combination of the vertical radiating metallic line (13, 713) and a second horizontal metallic line (12, 712) forms a resonant path of the antenna responsible for a higher operating frequency. Wong fails to disclose *both a first end of a strip portion of a first conductor and a first end of a second conductor being connected to the feeding point* as claimed. Applicant respectfully submits that independent claim 1 distinguishes over Wong. Withdrawal of the rejection of independent claim 1 is respectfully requested.

Dependent claims 6-7 depend from and further restrict independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claims 6-7 distinguish over Wong and are in condition for allowance. Withdrawal of the rejection of dependent claims 6-7 is respectfully requested.

Claim 9 has been amended to now be an independent claim by incorporating features from independent claim 1. Applicant respectfully submits that Wong fails to teach or suggest at least one of the distinguishing features of independent claim 9, namely, a first conductor for

receiving networking signals in the frequency range of about 4.9 GHz to about 5.875 GHz, the first conductor comprising a polygonal portion and further comprising a strip portion having a width smaller than a width of a polygonal portion, a first end of the strip portion is connected to a feeding point, and a second end of the strip portion is connected to the polygonal portion. For similar reasons as stated above with respect to independent claim 1, Applicant respectfully submits that independent claim 9 distinguishes over Wong. Withdrawal of the rejection of claim 9 is respectfully requested.

Independent claim 11 relates to a symmetrical multi-band monopole antenna. Applicant respectfully submits that Wong fails to teach or suggest at least one of the distinguishing features of independent claim 11, namely, first and second conductors for receiving networking signals in the frequency range of about 4.9 GHz to about 5.875 GHz, each of the first and second conductors comprising a polygonal portion having symmetrical polygonal shapes with an aspect ratio of length to width of less than about 5 to about 1. In addition, Wong fails to disclose each of the first and second conductors further comprising a strip portion having a width smaller than a width of the polygonal portion, a first end of the strip portion of each of the first and second conductors is connected to the polygonal portion, and a second end of the strip of each of the first and second conductors is connected to a feeding point and third and fourth conductors comprise a first end connected to the feeding portion.

Wong discloses dual-band monopole antenna for a WLAN system. The antenna comprises first and second horizontal radiating metallic lines disposed substantially parallel to each other and connected to a vertical radiating metallic line at different positions forming a stacked double T shaped. In Wong, a first conductor, as illustrated in Figures 1 and 7, is formed by half of the first and second horizontal radiating metallic lines 12 and 712. In contrast, the first conductor of Wong fails to disclose that each of the first and second conductors comprises *a strip portion having a width smaller than a width of a polygonal portion* as claimed. In addition, according to Wong, a combination of a vertical radiating metallic line (13, 713) and a first horizontal metallic line (11, 711) forms a resonant path of the antenna responsible for a lower operating frequency, while a combination of the vertical radiating metallic line (13, 713) and a second horizontal metallic line (12, 712) forms a resonant path of the antenna responsible for a

higher operating frequency. Wong fails to disclose a second end of the strip portion of each of the first and second conductors is connected to a feeding point and third and fourth conductors comprise a first end connected to the feeding portion as claimed. Applicant respectfully submits that independent claim 11 distinguishes over Wong. Withdrawal of the rejection of independent claim 11 is respectfully requested.

Dependent claims 16-17 depend from and further restrict independent claim 11 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 11, dependent claims 16-17 distinguish over Wong and are in condition for allowance. Withdrawal of the rejection of dependent claims 16-17 is respectfully requested.

Claim 19 has been amended to now become an independent claim by incorporating features from independent claim 11. Applicant respectfully submits that Wong fails to teach or suggest at least one of the distinguishing features of independent claim 19, namely, first and second conductors for receiving networking signals in the frequency range of about 4.9 GHz to about 5.875 GHz, each of the first and second conductors comprising a polygonal portion having symmetrical polygonal shapes with an aspect ratio of length to width of less than about 5 to about 1. In addition, Wong fails to disclose each of the first and second conductors further comprising a strip portion having a width smaller than a width of the polygonal portion, a first end of the strip portion of each of the first and second conductors is connected to the polygonal portion, and a second end of the strip of each of the first and second conductors is connected to a feeding point and third and fourth conductors having a first end connected to the feeding portion. For similar reasons as stated above with respect to independent claim 11, Applicant respectfully submits that independent claim 19 distinguishes over Wong. Withdrawal of the rejection of claim 19 is respectfully requested.

Claims 3-5 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yeh. Dependent claims 3-5 and 8 depend from and further restrict independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claims 3-5 and 8 distinguish over Yeh

and are in condition for allowance. Withdrawal of the rejection of dependent claims 3-5 and 8 is respectfully requested.

Claims 13-15 and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yeh. Dependent claims 13-15 and 18 depend from and further restrict independent claim 11 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 11, dependent claims 13-15 and 18 distinguish over Yeh and are in condition for allowance. Withdrawal of the rejection of dependent claims 13-15 and 18 is respectfully requested.

Claims 2 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yeh in view of U.S. Patent No. 4,356,492 to Kaloi (“Kaloi”). Claims 2 and 12 have been canceled, thus rendering the rejection of claims 2 and 12 moot.

Claims 10 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yeh in view of JP 2003347828 to Hirabayashi (“Hirabayashi”). Claim 10 depends from and further restricts independent claim 1 in a patentable sense. Claim 20 depends from and further restricts independent claim 19 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claims 1 and 19, respectively, dependent claim 10 and 20 distinguish over Yeh and are in condition for allowance. Hirabayashi fails to cure the deficiencies of Yeh noted above. Withdrawal of the rejection of dependent claims 10 and 20 is respectfully requested.

New claims 21-23 depend from and further restrict independent claim 1 in a patentable sense. New claim 24 depends from and further restricts independent claim 9 in a patentable sense. New claims 25-28 depend from and further restrict independent claim 11 in a patentable sense. New claim 29 depends from and further restricts independent claim 19 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claims 1, 9, 11, and 19, respectively, dependent claims 21-29 distinguish over the cited references and are in condition for allowance.

In view of the above amendment, Applicant respectfully submits that the present application is in condition for allowance. A Notice to that effect is respectfully requested.

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Respectfully submitted,

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